HABITAT IDENTIFICATION AND CHARACTERIZATION

ID-1: Create and provide access to interactive habitat maps for priority Gulf of Mexico habitats

36-Month Outcome:
• Produce a prototype Web portal to provide public access to and delivery of current and historic state, federal, and local Gulf of Mexico habitat data, with the initial focus on sea grass beds. Users will be able to search a digital library for habitat information by keyword or geographic location, preview geospatial data, and download selected data products. The portal will also demonstrate the feasibility of building a distributed system that will enable users to request and retrieve data directly from the agencies holding the original data.

Action Blueprint:

ACTION	LEAD	CONTRIBUTOR	COLLABORATOR	WHAT WILL YOU DO / DELIVER?	STATUS 02-05-07	REFINED OUTCOME	KEY NEXT STEPS
1. Coordinate federal and state collection of information and complete an inventory of existing habitat data and initiate a gap analysis. This inventory will identify available data and associated metadata. The inventory will have both a regional and local scope and will focus on mapping and restoration projects. Products will include: (a) User Needs Assessment; (b) Inventory of Gulf of Mexico Habitat Data; and (c) Assessment of Priority Gulf of Mexico Habitat Data Needs.	Identification of Lead still pending	Alabama, Florida, Louisiana, Mississippi, Texas, NOAA, USGS, NASA, EPA	MMS, NPS	NOAA will facilitate participation of the Gulf State Coastal Management Programs, which have primary responsibility for protection, restoration, and mitigating the loss of coastal wetlands. (Lead: NOS OCRM) NOAA will provide sea grass maps for the Texas bend area derived from recent digital aerial photography (Lead: NOAA CSC) and additional data layers (Lead: NESDIS NCDDC). NOAA will provide assistance or training on needs assessment, if asked by the Alliance (Lead: NOAA CSC) USGS will coordinate by supplying existing databases, metadata, maps, and images. NPS will provide existing data and other available information. NASA will inventory its existing remotely sensed data and assets for use in habitat mapping. EPA will support the action lead(s) by ensuring EPA's data management programs (e.g., EMAP and STORET) are properly accounted for and included in this action. Additionally, EPA will actively explore internal funding opportunities to assist NOAA in the development and update of the coastal Environmental Sensitivity Index Maps for the Gulf region. AL will provide state habitat data, and associated metadata, to t FL will coordinate state participation in coordination efforts and i LA will provide state habitat data, and associated metadata, to t MS will provide state habitat data, and associated metadata, to t TX will provide state habitat data, and associated metadata, to t MMS funded development of the G-WIS in the late 1990s which	(1) The Apalachicola National Estuarine Research Reserve, USGS, and NOAA are mapping oyster reefs, geology, and bathymetry within Apalachicola Bay, integrating side-scan sonar, interferometric swath bathymetry, and seismic refl ection acoustic techniques with video imagery and traditional sampling. These habitat characterization data sets, to be delivered by spring 2007, will meet the local resource management community's need for comprehensive and up-to-date oyster, sediment, and bathymetric maps, which will support improved decision-making. (2) NOAA CSC Digital Coast – Legislative Atlas Alabama, Florida, Louisiana, Mississippi, Texas. A legislative atlas is ready for internal review before public release. Once releases, users will be able to point to a place on the map in the project area and find information about the local, state, and federal policies, legislation, and jurisdictional boundaries that are pertinent to that location.(3) 2005 – 2008, Texas Benthic (SAV) Mapping. This Benthic Habitat Project provides tools, technical guidance, and data to the coastal m (4) FL needs assessment meeting was held in mid-	GOM habitat data inventory. Data gap analysis. Strategic plan for data collection.	The HabID Team is visiting the five Gulf States to assess their priority habitat data needs. The meeting with the State of Alabama will be held on Tuesday, February 6th at the ADCNR, Dauphin Island Office, Marine Resources Division. The meeting with the State of Louisiana will be held on Thursday, February 8th at the LDWF in Baton Rouge, Louisiana. The meeting with the State of Texas will be held on Thursday, February 22nd at the TPWD in Austin, Texas. The meeting with the State of Mississippi will be held on Thursday, March 15th at the MDMR, in Biloxi.

					USGS-USACE-NOAA will present a white paper on providing a data portal to support all five Priority Issue Teams.
2. Establish the Federal Data Management Group (FDMG), a team to work with state, local, and federal entities to identify specific requirements for a regional data management platform and portal.	NOAA, USGS, USACE	EPA	Florida, NPS, USFWS	NOAA will serve as a co-chair, along with USGS and USACE, of the FDMG, and provide staff assistance to the group's activities. (Lead: NOAA CSC, with support from NOS SP and NCDDC) USACE will co-lead the FDMG and help identify requirements for regional data management. This will include a pilot system linking NOAA/USGS/USACE data with documentation how to expand it to other participants (see Step #4). USGS will also co-lead this effort. USFWS and NPS will cooperate and provide technical advice to this effort. EPA will assist the action lead(s) in identifying the requirements for a regional data management platform and supporting portal by providing resource and facilitation support for a regional State and Federal technical workshop. FL will coordinate state participation in FDMG activities. (Lead: Florida Fish and Wildlife Conservation Commission)	(1) Working closely with the five U.S. Gulf States, USGS, USACE and NOAA are working collaboratively to develop a pilot spatial data viewer and digital library for Gulf region seagrass data and information. The web-based product will allow state, local, and federal managers to improve decision-making through significantly increased access to spatial data. NOAA sponsored an associated ecosystem data workshop, focusing on Alabama, Louisiana, and Mississippi needs, at Stennis Space Center on June 7-8. A beta version of PHINS is scheduled for release in the summer of 2007, in conjunction with the second Gulf of Mexico Summit. The PHINS development team met in August 2006 and developed a work plan outlining action items and commitments through the beta version release.
3. Establish a standard metadata format to streamline metadata development and maintenance at the state, local, and federal level.	Identification of Lead still pending	USGS, EPA	USFWS, NPS, NOAA, Florida	USGS will help promote FGDC metadata standards and will make metadata training available. USFWS and NPS will collaborate with other agencies on this venture. EPA will assist the action lead(s) in establishing and implementing the associated delivery of metadata training and tech support. NOAA will provide guidance on the use of metadata standards for data documentation and maintenance. (Lead: NOAA CSC, NESDIS NCDDC) FL will coordinate state participation in the development of a standard metadata format. (Lead: Florida Fish and Wildlife Conservation Commission)	(1) NOAA NCDDC has completed MERMAID metadata extension to record PHINS records. Allows ingest of record into the USGS PHINS Digital Catalog. Additional GMPO has funded NatureServ to provide a standard classification scheme for all habitat data recorded on PHINS.
4. Establish a data management platform and portal that will provide access and delivery of existing state, local, and federal data.	Identification of Lead still pending	USGS, USACE, NOAA	USFWS, EPA, Florida	USACE will continue USACE-wide implementation of existing Federal & USACE policy & guidance for spatial data & eGIS to ensure USACE data are available. The Corps will also continue development of the USACE National Coastal Databank and contribute to development of a pilot system for GoMex Alliance use. Within existing funds, USGS will continue to collaborate with partners in developing and expanding the existing USGS Gulf Data and Information Management System. NOAA will offer the Ocean Planning Information System (OPIS) as a framework for the portal. (Lead: NOAA CSC) USFWS will provide access to existing didgital maps under the Nationa Wetlands Inventory and some analytical expertise. EPA will work, in cooperation with the action lead(s), to coordinate the integration of the Agency's environmental monitoring systems in support of the implementation of the regional data management platform targeted in this action. FL will coordinate state participation in the development of data management platform and portal. (Lead: Florida Fish and Wildlife Conservation Commission)	(1) PHINS will be loaded on to the Gulf Alliance website for demonstration purposes in February 2007.

5. Provide data management training, software, and hardware acquisition to Gulf state agencies.	Identification of Lead still pending		Louisiana, EPA	EPA will work with the action lead(s), in cooperation with the Agency's state agency programs implementation partners, to identify the current technology (hardware, software, and telecommunications) and training gaps that would impede the delivery of the proposed system. LA will participate in training courses and will use data management hardware and software as staff time will allow.	(1) Personnel from the NOAA CSC recently traveled to Apalachicola, Florida, to deliver geographic information systems (GIS) and data documentation training to staff members from Franklin County and the Apalachicola National Estuarine Research Reserve (NERR). The Center-funded grant will enable the Reserve to develop GIS capability and purchase hardware and software. When the grant concludes, the Reserve will turn over the software to Franklin County, which will use it to track permitting activities, thereby supporting natural resource management efforts.	
6. Provide GIS and metadata training to the state and local Gulf States resource managers.	NOAA	Florida, USACE, USGS, EPA	Louisiana	NOAA will provide training on the use of metadata standards for data documentation and maintenance. NOAA will provide "GIS for your Organization" and "Coastal Applications of GIS" training classes to the Gulf States and partners. (Lead: NOAA CSC) FL NERRs Coastal Training Program will host GIS training classes. (Lead: FDEP CAMA) USACE will contribute by providing eCoastal & National Coastal Databank training to USACE and Project Sponsors to facilitate Gulf-wide use capability. USGS will help promote FGDC metadata standards and will make metadata training available. EPA will assist the action lead(s) in establishing and implementing the associated delivery of GIS and metadata training and tech support by co-supporting the facilitation and implementation of a regional training workshop. LA will attend training courses as staff time will allow.	(1) Since the release of the Governors' Action Plan in March 2006, NOAA has provided coastal resource managers and technical staff in Florida and Alabama with four introductory courses in the basic use of GIS and two courses in applications of GIS to coastal management issues, including metadata training.	
7. Evaluate the types of technologies and procedures needed to map Gulf of Mexico seafloor habitats and establish a baseline information and mapping system.	Identification of Lead still pending	NOAA	Louisiana	NOAA will evaluate the currently-underway Southern Florida Coral Ecosystem Mapping Project as a demonstration of the potential challenges involved in the identification and assessment of the locations, extent, variation, and condition of coastal, nearshore, and offshore Gulf of Mexico seafloor habitats. (Lead: NOS SP) LA will participate as resources will allow.	(1) State of Florida, the Southeastern Regional Partnership for Planning and Sustainability and USGS are hosting a mapping technology workshop in St. Petersburg, FL, Feb. 7-8. The objective of this workshop is to make descicions on priorities for mapping around FL. (2) Similarly, NOAA GCSC and CSC are planning a workshop in June 2007 to share information on mapping technologies and to develop a mapping application of the Coastal and Marine Ecological Classification Standard for the United States.	NOAA CSC will host a workshop to identify the current state of technology for habitat mapping and classification in the summer of 2007. This workshop will include mapping experts from around the country and will provide opportunities for information sharing and collaboration.